

Amendments to the Specification

Please add the following new heading before the paragraph [0002]:
--BACKGROUND--.

Please add the following new heading before the paragraph [0007]:
--SUMMARY OF THE INVENTION--.

Please replace paragraph [0007] with the following amended paragraph:
[0007] ~~The invention is based on the object of integrating~~ An object of the present invention is to integrate antenna elements in plastic components in a simple and low-cost manner and also ~~of ensuring~~ to ensure maximum mechanical protection of said antenna elements.

Please delete paragraph [0008].

Before paragraph [0009], please insert new paragraph [0008.1] as follows:
--[0008.1] The present invention provides a method for producing a vehicle part with an integrated antenna element. The method includes:
 providing a plastic substrate by a molding process;
 providing a coating layer by a film coating process; and
 providing at least one antenna element disposed between the coating layer and the plastic substrate.--.

Please replace paragraph [00013] with the following amended paragraph:
[0013] When the antenna elements are integrated in the plastic components, it has proven to be ~~particularly~~ successful to integrate the introduction of the elements together with the coating operation in the molding process. For example, it is advantageous when using a mold to introduce the antenna elements into the mold before the molding operation. After the molding process, the surface of the components with the already superficially integrated antenna elements can then be treated either by a conventional coating method or by a film coating method.

Please replace paragraph [0014] with the following amended paragraph:

[0014] When a film coating method is used, it is similarly possible to apply the antenna elements to the coating film before the molding process. After that, the coating film is introduced into the mold and subsequently has a backing substrate applied to it by an injection-molding or foaming process. In this way, the introduction of the antenna elements is integrated into the coating and molding operation in ~~a particularly~~ an advantageous way.

Please replace paragraph [0015] with the following amended paragraph:

[0015] ~~It goes without saying that the~~ The processes that have proven successful for the metallization of films, such as structured direct metallization or screen-printing processes for example, can be used in an advantageous way for applying the antenna elements to the coating film. In the case of direct metallization, the coating film is initially chemically activated; subsequently, a thin layer of metal is deposited on the rear side of the coating film in a metallic salt solution and is subsequently galvanically reinforced to the thickness necessary for adequate mechanical stability and electrical conductivity. Following that, the metal layer can be structured by known photolithographic processes. ~~The main advantages~~ Advantages of this process are the high achievable accuracy and the good adhesion of the metal layer on the coating film.

Please replace paragraph [0016] with the following amended paragraph:

[0016] ~~It goes without saying that the~~ The plastic substrates can also be metallized by the processes mentioned.

Please replace paragraph [0021] with the following amended paragraph:

[0021] It is ~~particularly~~ advantageous to provide the leading-through of the conductor already during the molding process. For example, the opening necessary for this can already be taken into account in the design of the mold and in this way dispense with a subsequent further working step, such as drilling for example.

Please replace paragraph [0024] with the following amended paragraph:

[0024] ~~A particularly~~ An advantageous embodiment of the module consists in providing that it is integrated in a housing which can be attached in a defined manner to the plastic part, for example by a latching or adhesive-bonding technique. In this way, the spatial alignment of the coupling slots with respect to the introduced antenna element is defined in an advantageous way and the attachment of the module is simplified. In addition, easy exchangeability of the module is ensured, for example in the case of hardware updates.

Please add the following new heading before the paragraph [0026]:
--BRIEF DESCRIPTION OF THE DRAWINGS--.

Please replace paragraph [0026] with the following amended paragraph:
[0026] The invention is explained below on the basis of ~~two~~ exemplary embodiments ~~and the associated drawings, in which:~~ with reference to the drawings.

Please add the following new heading before the paragraph [0029]:
--DETAILED DESCRIPTION--.